

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An apparatus for receiving a signal of digital broadcasting service, comprising:

an array antenna having a plurality of antenna elements, each antenna element for receiving broadcast signals ~~of from~~ the digital broadcasting service;

a demodulation means for demodulating the ~~receiving~~ broadcast signals, each corresponding to each of antenna elements included in the array antenna;

a beam-forming means for receiving modulated signals of the demodulation means to generating ~~generate~~ a predetermined number of beamformed ~~signal~~ signals ~~by applying based on different~~ a beam-forming weights in order to steer each of the ~~beam~~ predetermined number of beamformed signals to a predetermined direction according to the modulated ~~signal signals from the modulation means~~ signal signals; and

a beam selection means for ~~selectively receiving~~ selecting one of the predetermined number of beamformed signals based on each predetermined direction of the predetermined number of beamformed signals ~~of desired direction according to the beam forming signal~~, wherein the selected beamformed signal has the most desirable direction.

2. (Currently Amended) The apparatus as recited in claim 1, wherein the array antenna is a ~~second~~ predetermined number of axis linear ~~array~~ arrays, each having a ~~first~~ predetermined number of antenna elements.

3. (Currently Amended) The apparatus as recited in claim 1, wherein the array antenna is a ~~circular~~ at least one circular-type array antenna having a ~~third~~ predetermined number of antenna elements.

4. (Currently Amended) The apparatus as recited in claim 1, wherein the array antenna is a at least one planar array antenna having a ~~third~~ predetermined number of antenna elements.

5. (Currently Amended) The apparatus as recited in claim 1, wherein the demodulation means includes a plurality of demodulators, the number of

demodulators equaling as many as the number of antenna elements in the array antenna.

6. (Currently Amended) An apparatus for receiving a signal of digital broadcasting service, comprising:

switched beamforming means for generating a beamformed signal in order to direct a predetermined number of angles by applying a beam-forming weight to a received signal ~~of from the~~ digital broadcasting service and selectively receiving a signal of a desired direction; and

beam selection means for selectively receiving the signal of desired direction according to a predetermined number of beam forming signals.

7. (Currently Amended) The apparatus as recited in claim 6, wherein the switched beamforming means includes:

beam-forming means for generating a predetermined number of beamformed signals by applying beam-forming weights in order to steer the beam to a predetermined direction to receive a digital broadcasting signal; ~~and~~

wherein the predetermined number of beam forming signals are generated by the beam forming means.

~~beam selection means for selectively receiving signal of desired direction according to a predetermined number of beam forming signals generated by the beam forming means.~~

8. (Currently Amended) The apparatus as recited in claim 7, wherein the beam-forming means outputs a signal by eliminating multipath receiving signals ~~of multipath~~ to a channel equalizer ~~in order~~ to improve equalization performance of the channel equalizer.